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| APPLICATION NO.  | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|--|----------------|----------------------|-------------------------|------------------|--|
| 09/833,637   | 04/13/2001     | Yoshikatsu Kodama    | 011900-309              | 3072             |  |
| 7:   | 590 07/29/2003 |                      |                         |                  |  |
| Platon N. Mandros<br>BURNS, DOANE, SWECKER & MATHIS, L.L.P.<br>P.O. Box 1404 |                |                      | EXAMI                   | EXAMINER         |  |
|  |                |                      | KAM, CHIH MIN           |                  |  |
| Alexandria, VA   | A 22313-1404   | •                    | ART UNIT                | PAPER NUMBER     |  |
|  |                |                      | 1653                    | 15               |  |
|  |                |                      | DATE MAILED: 07/29/2003 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No. Applicant(s)   |   |  |
|---|--|---|--|
| Advisory Action   | 09/833,637   | KODAMA ET AL.   |  |
| riariosi y riodon   | Examiner   | Art Unit  |  |
|   | Chih-Min Kam   | 1653  |  |
| The MAILING DATE of this communication appe   | ars on the cover sheet with the c  | orrespondence add   | ress   |
| THE REPLY FILED 02 July 2003 FAILS TO PLACE THIS Therefore, further action by the applicant is required to average final rejection under 37 CFR 1.113 may only be either: (1) condition for allowance; (2) a timely filed Notice of Appeal Examination (RCE) in compliance with 37 CFR 1.114.   | void abandonment of this applica<br>) a timely filed amendment whicl<br>I (with appeal fee); or (3) a timel  | ation. A proper reply<br>h places the applica   | y to a<br>ition in   |
| PERIOD FOR RE   | EPLY [check either a) or b)]   |   |  |
| a) The period for reply expires 6 months from the mailing date b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire Is ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The fee have been filed is the date for purposes of determining the period o fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of t (2) as set forth in (b) above, if checked. Any reply received by the Office timely filed, may reduce any earned patent term adjustment. See 37 C | Advisory Action, or (2) the date set forth ater than SIX MONTHS from the mailing FILED WITHIN TWO MONTHS OF THE date on which the petition under 37 CF of extension and the corresponding amount the shortened statutory period for reply the later than three months after the main attention and the shortened statutory period for reply the later than three months after the main attention and the shortened statutory period for reply the later than three months after the main attention and the shortened statutory period for reply the later than three months after the main attention and the shortened statutory period for reply the later than three months after the main attention and the shortened statutory period for reply the shortened statutory period for the shortene | g date of the final rejecting FINAL REJECTION.  R 1.136(a) and the approperation of the fee. The appropriginally set in the final | on. See MPEP opriate extension opriate extension Office action; or |
| 1. A Notice of Appeal was filed on Appellant's 37 CFR 1.192(a), or any extension thereof (37 CFF  |  |   |  |
| 2. The proposed amendment(s) will not be entered be   | ecause:  |   |  |
| (a)  they raise new issues that would require further   | er consideration and/or search (s  | see NOTE below);  |  |
| (b) they raise the issue of new matter (see Note b  | elow);   |   |  |
| (c)  they are not deemed to place the application in<br>issues for appeal; and/or   | n better form for appeal by mate   | rially reducing or sir  | nplifying the  |
| (d) they present additional claims without canceling  | ng a corresponding number of fi  | nally rejected claim  | s.   |
| NOTE: <u>See Continuation Sheet</u> .   |  |   |  |
| 3. Applicant's reply has overcome the following rejection   | ion(s):  |   |  |
| 4. Newly proposed or amended claim(s) would canceling the non-allowable claim(s).   | be allowable if submitted in a se  | eparate, timely filed   | amendment  |
| 5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for application in condition for allowance because: See  | reconsideration has been consi<br><u>e Continuation Sheet</u> .  | dered but does NO   | T place the  |
| 6. The affidavit or exhibit will NOT be considered becaraised by the Examiner in the final rejection.   | ause it is not directed SOLELY to  | o issues which were   | e newly  |
| 7. For purposes of Appeal, the proposed amendment explanation of how the new or amended claims wo   |  |   | and an   |
| The status of the claim(s) is (or will be) as follows:  |  |   |  |
| Claim(s) allowed: 27-30.  |  |   |  |
| Claim(s) objected to: 17-21.  |  |   |  |
| Claim(s) rejected: <u>16 and 22-26</u> .  |  |   |  |
| Claim(s) withdrawn from consideration: 12-15.   |  |   |  |
| 8. The proposed drawing correction filed on is a  | a)  approved or b) disapp  | roved by the Exami  | ner.   |
| 9. Note the attached Information Disclosure Statemen  | it(s)( PTO-1449) Paper No(s)   |   |  |
| 10. ☐ Other:  | · · · · · · · · · · · · · · · · · · ·  |   |  |
| <del></del>   |  |   |  |
|   |  |   |  |



Continuation of 2. NOTE: The reply filed July 2, 2003 does not resolve the current issues under 35 USC 112, second paragraph. Applicants' response has been fully considered, however, claims 16 and 22-26 are rejected under 35 USC 112, second paragraph.

The following response is made to applicants' reply:

1. Claims 16 and 22-26 remain rejected under 35 U.S.C. 102(b) as being anticipated by Peterson et al. (U. S. Patent 5,505,955). Peterson et al. teach a glycoprotein, which has a molecular weight of 46 kDa and is isolated upon fractionation of human milk fat globules (column 5, lines 23-35; Example 7), absent factual data to the contrary, is the claimed glycoprotein and has the inherent property of the claimed glycoprotein (claim 16). Therefore, chicken egg or milk is anticipated as a food (claim 24) and a pharmaceutical composition (claim 23) which have the property of the glycoprotein, and as an inhibitor of Helicobacter pylori colonization (claim 22). Chicken egg or milk also contains fat which is an inhibitor of gastric acid secretion, therefore chicken egg or milk is anticipated as an inhibitor composition of Helicobacter pylori colonization (claim 25) and a pharmaceutical composition (claim 26) which contain the properties of the glycoprotein and fat.

In response, applicants indicate the glycoprotein of the '995 patent does not specifically bind to Helicobacter pylori urease because the glycoprotein of the '995 patent is derived from milk fat globules (MFG) and has little inhibitory activity against Helicobacter pylori urease adherence to gastric mucosa;and the term "specifically binds" is known in the art, which means a substance binds to a particular partner with high affinity, and the specification has define the term as "predominantly binding to the urease" (page 9, lines 3-6 and page 20, lines 19-21), thus the glycoprotein of the '995 patent which binds Helicobacter pylori urease only weakly cannot be a protein as claimed in the instant application which specifically binds to Helicobacter pylori urease. The response has been fully considered, however, the argument is not found persuasive because of the following reasons: The glycoprotein of the '995 patent has inhibitory activity of IC50 values of 324-397 ug/ml against Helicobacter pylori urease (Table 1 of Exhibit A, Paper No. 11), which although is higher than those (3.9-4.5 ug/ml) of glycoprotein from bovine milk whey, but by no means it has little inhibition because these values are compatible to porcine gastric mucin (290.2 ug/ml) and in the similar range (<1.0 to 311 ug/ml) labled for high affinity group of inhibitors (see Gastroenterology, 119, 358-367 (2001), Table 1). Therefore, the glycoprotein of the '995 patent can be considered as high affinity inhibitor to Helicobacter pylori urease, which means it is specifically binds to Helicobacter pylori urease; Regarding the term "specifically binds" being defined as "predominantly binding to the urease", the glycoprotein of the '995 patent also fits to the definition because the glycoprotein has high affinity to Helicobacter pylori urease. Therefore, the glycoprotein of the '995 patent cannot be differentiated from the glycoprotein recited in claim 16.

Continuation of 5. does NOT place the application in condition for allowance because: The amendment to the claims does not resolve current issue under 35 USC 112, second paragraph.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (703) 308-9437. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low, Ph. D. can be reached on (703) 308-2923. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-0294 for regular communications and (703) 308-4227 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Chih-Min Kam, Ph. D. July 24, 2003

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